

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE**

UNIVERSITY OF TENNESSEE RESEARCH
FOUNDATION and SAINT MATTHEW
RESEARCH, LLC,

Plaintiffs,

v.

AMAZON.COM, INC. and AMAZON WEB
SERVICES, INC.

Defendants.

Civil Action No. 3:17-cv-00181-HSM-CCS

**DEFENDANTS' BRIEF IN SUPPORT OF THEIR MOTION TO DISMISS OR
TRANSFER FOR IMPROPER VENUE AND FOR FAILURE TO STATE A CLAIM**

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PRELIMINARY STATEMENT

The Supreme Court's recent *TC Heartland* decision overruled the premise for Plaintiffs' venue allegations, making it clear that a domestic corporation may be sued for patent infringement only where it is incorporated, or where it has committed acts of infringement and has a "regular and established place of business." 28 U.S.C. § 1400(b). Defendants, Amazon.com, Inc., and Amazon Web Services, Inc. ("AWS"), meet neither criterion.

Both Defendants are Delaware corporations. Amazon.com, Inc., has no facilities and no employees in this district. AWS—the company that designs, builds, markets, and sells the cloud computing services that Plaintiffs accuse of infringing their patents—also has no facilities in this district. Of thousands of AWS employees, four happen to *live* in this district, where they work from their homes, rather than from an AWS place of business. Neither Defendant should be confused with the separately incorporated entities that run Amazon's retail business. The unrelated operations of these different companies cannot establish venue for the Defendants in this case. Accordingly, Defendants respectfully request that the Court dismiss this case for improper venue or, in the alternative, transfer the case to a district where venue would be proper, which given the facts here would be either the Western District of Washington or the Northern District of California.

In addition, the Complaint should be dismissed pursuant to Rule 12(b)(6) because it fails to state a plausible cause of action for patent infringement. A patent infringement complaint must allege facts to show how the accused products supposedly satisfy every limitation of at least one patent claim. But for many of the limitations here, the Complaint merely parrots the claim language, offering a bare legal conclusion without any relevant factual allegations. Such threadbare allegations are not enough to plead a plausible claim for infringement.

FACTUAL BACKGROUND

I. Plaintiffs' Complaint and the Named Defendants

Plaintiffs filed this action on May 2, 2017, alleging infringement of five patents, U.S. Patent Nos. 7,454,411 (the “’411 patent”), 8,099,733 (the “’733 patent”), 6,741,983 (the “’983 patent”), 7,272,612 (the “’612 patent”), and 7,882,106 (the “’106 patent”) (collectively, the “Asserted Patents”). Plaintiffs are the University of Tennessee Research Foundation (“UTRF”) and a California nonpracticing entity, Saint Matthew Research Foundation, to which UTRF allegedly has granted an exclusive license to the patents-in-suit. *See* Dkt. 1 ¶¶ 20-24.

Defendant AWS is a Delaware corporation, headquartered in Seattle, Washington. *Ex. A* (Wallace Decl.) ¶ 2. AWS provides a broad set of cloud-based computing services to customers. *Id.* ¶¶ 9-10. The products and services accused of infringement in Plaintiffs’ Complaint (Dkt. 1 ¶¶ 59, 82, 110, 132, 150), *i.e.*, Amazon Redshift, Amazon Relational Database Service, and Amazon Machine Learning (collectively, the “Accused Services”), are all part of the Amazon Web Services family of services. *Ex. A* ¶¶ 8-9.

The other named Defendant, Amazon.com, Inc., is the ultimate parent company of AWS and a variety of other entities. *Id.* ¶¶ 3, 5. Most famously, it owns businesses that comprise the world’s largest online marketplace, Amazon.com, through which various merchants sell and ship a variety of physical goods around the world. The main entity responsible for running the Amazon.com website is Amazon Services LLC. *Id.* ¶ 4. Amazon.com, Inc., is a holding company. *Id.* ¶ 3. It organizes its holdings “into three segments: North America, International, and Amazon Web Services.” *Ex. B-1* (Amazon 10-K) at 3, 66-69. “These segments reflect the way the Company evaluates its business performance and manages its operations.” *Id.* at 3. Separate books are maintained for each segment. *See, e.g., id.* at 23-24, 53, 67-69. In other words, AWS is its

own business organization, incorporated, evaluated, managed, and operated as a separate business from Amazon's domestic and international retail operations.

In contrast to the physical goods customers purchase on the Amazon.com website, the Accused Services (like the rest of AWS's business line) are cloud computing services. Ex. A ¶¶ 8-10. Customers access those services by communicating with servers, all of which are located outside this district. *Id.* ¶ 10.

The Complaint does not allege that either of the named Defendants has a place of business in this district. Plaintiffs allege only that "Amazon"—an abbreviation the Complaint uses to refer to both Defendants without distinction between them—has offices somewhere in Tennessee and that, "upon information and belief," Amazon has transacted business and committed acts of infringement in the district. Dkt. 1 ¶¶ 28, 31. Neither of these allegations demonstrate that either Defendant, much less both of them, has a regular and established place of business specifically in this district.

II. Defendants Do Not Have a Regular and Established Place of Business in This District

In fact, neither Defendant has any facilities, real estate, or other place of business in the Eastern District of Tennessee. Ex. A ¶ 6. As the Complaint alleges, both Defendants are Delaware corporations with their principal places of business in Seattle, Washington. Dkt. 1 ¶¶ 26-27. Defendants run their operations from their Seattle headquarters and from other offices outside the Eastern District of Tennessee. Amazon.com, Inc., has no employees in this district. Ex. C (Thomas Decl.) ¶ 2.

AWS is the world's leading cloud-computing provider, with thousands of employees in the U.S. alone. *Id.* ¶ 3. Four of these AWS employees live in the Eastern District of Tennessee. *Id.*

Those four employees work from their homes or from customer sites. *Id.* ¶ 4. None of them work from any AWS office in the district, because no such office exists. *Id.*; Ex. A ¶ 6.

Amazon.com, Inc., owns holdings in a number of subsidiaries other than AWS. One of those separate corporate entities, Amazon.com.dedc, LLC, has real estate in this district: distribution facilities for shipping packages containing products purchased on the Amazon.com website. Ex. C ¶ 7. These facilities do not engage in sales, development, or service of the Accused Services and have no relationship to the business of AWS. *Id.* That is because they are not AWS facilities, but instead are part of a wholly separate line of business. Plaintiffs' complaint offers no allegations to the contrary.

Accordingly, the Complaint fails to allege any connection between the Accused Services and this district beyond the happenstance that some Accused Services may be used in the district. At most, it contains conclusory, and insufficient, legal statements that Defendants have committed acts of infringement, transacted business, and directed activities towards the district—none of which is enough to establish venue in a patent case.

ARGUMENT

I. This Case Should be Dismissed for Improper Venue

A. Venue in Patent Cases

Under 28 U.S.C. § 1406(a), a “district court of a district in which is filed a case laying venue in the wrong division or district shall dismiss, or if it be in the interest of justice, transfer such case to any district or division in which it could have been brought.” 28 U.S.C. § 1406(a). “In considering a Rule 12(b)(3) motion to dismiss, the plaintiff bears the burden of proving that venue is proper.” *Marion v. Conley*, No. 306-CV-268, 2006 WL 4608613, at *1 (E.D. Tenn. Oct. 4, 2006) (quotation marks omitted). “[W]hen venue is ‘wrong’ or ‘improper’ in the forum in which it was brought,” the case should be dismissed or transferred. *Atlantic Marine Constr. Co., Inc. v.*

U.S. Dist. Court for the W. Dist. of Tex., 134 S. Ct. 568, 577 (2013). Moreover, because ““venue in the federal courts is a privilege personal to each defendant,”” even if venue is proper as to one defendant, it may still be improper as to another defendant. *Stuebing Automatic Mach. Co. v. Gavronsky*, No. 1:16-CV-576, 2017 WL 3187049, at *3 (S.D. Ohio June 12, 2017) (quoting *Barber-Greene Co. v. Blaw-Knox Co.*, 239 F.2d 774, 777 (6th Cir. 1957)).

Venue in patent cases is governed by 28 U.S.C. § 1400(b), which “is complete, independent and alone controlling in its sphere.” *Fourco Glass Co. v. Transmirra Prod. Corp.*, 353 U.S. 222, 228 (1957). Section 1400(b) permits venue in two places only: “[1] in the judicial district where the defendant resides, or [2] where the defendant has committed acts of infringement and has a regular and established place of business.”

The Supreme Court has long interpreted “resides” in clause [1] of this statute to “mean the state of incorporation only” for suits against domestic corporations. *Fourco*, 353 U.S. at 226. However, in 1990 the Federal Circuit departed from this interpretation, believing that a then-recent change in the general venue statute, 28 U.S.C. § 1391, had made the broader definition of “resides” in that general venue statute applicable to Section 1400(b). See *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1519-20 (2017) (discussing *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574 (1990)). And, because Section 1391 permits suit against a domestic corporation “in any judicial district” where it is subject to “personal jurisdiction” (28 U.S.C. § 1391(c)(2)), the Federal Circuit held that “venue in a patent infringement case includes any district where there would be personal jurisdiction over the corporate defendant.” *VE Holding*, 917 F.2d at 1578.

The Federal Circuit’s interpretation controlled for 27 years, until May 22, 2017, when in *TC Heartland*, the Supreme Court overruled *VE Holding*, restored its longstanding interpretation

of Section 1400(b) recited in *Fourco*, and held that “[a]s applied to domestic corporations, ‘reside[nce]’ in § 1400(b) refers only to the State of incorporation.” *TC Heartland*, 137 S. Ct. at 1521. As a result, it is now clear that venue is proper only in a district where the defendant is incorporated or has committed acts of infringement and has a regular and established place of business. *See id.* at 1516-17.

B. Venue Is Improper for AWS

1. *AWS Does Not Reside in the District*

AWS does not meet the first possible ground for venue—residence in the district. The Complaint (correctly) alleges that AWS is incorporated in Delaware. Dkt. 1 ¶ 27. Because “a domestic corporation ‘resides’ only in its State of incorporation for purposes of the patent venue statute,” *TC Heartland*, 137 S. Ct. at 1517, AWS resides in Delaware—not in this district.

2. *AWS Does Not Have a Regular and Established Place of Business in the District*

Nor does AWS meet the second possible ground for venue: “where the defendant has committed acts of infringement *and* has a regular and established place of business.” 28 U.S.C. § 1400(b) (emphasis added). As an initial matter, AWS denies that it has committed acts of infringement *anywhere*, including here. Even assuming infringement in this district, however, venue is improper because AWS has no “regular and established place of business” in this district.

Notably, the Complaint does not attempt to “allege that [AWS] ‘has a regular and established place of business’ in the [district]”—so its allegations cannot suffice to establish venue after *TC Heartland*. *QFO Labs, Inc. v. Parrot, Inc.*, No. 16-CV-3443 (JRT/HB), 2017 WL 2638389, at *6 (D. Minn. May 26, 2017), *report and recommendation adopted*, 2017 WL 2634155 (D. Minn. June 19, 2017) (emphasis added).

And, indeed, AWS has no “place of business” in the district at all. AWS does not own, rent, operate, or otherwise maintain any real estate in the district. Ex. A ¶ 6. Of AWS’s thousands of employees, four have *home addresses* in the district. Ex. C ¶ 3. Those employees’ homes are personal, private residences, under the sole control of the employees. While AWS allows these employees to work from their homes, away from any corporate office, AWS does not hold out these employees’ homes as its place of business with signs, directory listings, or otherwise. *Id.* ¶ 4. Moreover, AWS maintains no “inventory” of the Accused Services in this district. Rather, the servers that host the Accused Services are located entirely outside the district. Ex. A ¶¶ 8-10. As such, while they have involvement with sales and technical support of the Accused Services, none of the employees sell or distribute inventory stored in their homes.

AWS does have customers with places of business in the Eastern District of Tennessee, just as it does throughout the United States. But those places of business belong to customers—not AWS. On those occasions where an AWS employee might travel to *a customer’s* place of business, the reason he would do so, as opposed to having the customer come to him, is precisely because AWS does not have its own place of business in the Eastern District of Tennessee.

Such activities do not constitute “a regular and established place of business” under Section 1400(b). In *W.S. Tyler*, a patent case considering the same statutory language, the Supreme Court held that the mere employment of a sales representative, working out of a small office, in the district did not suffice to establish venue. *See W.S. Tyler Co. v. Ludlow-Saylor Wire Co.*, 236 U.S. 723, 725 (1915). There, the defendant—a Missouri corporation with its home office in St. Louis—had an employee who acted as its “Eastern representative,” working out of an office in New York City. *Id.* This employee used the office as his “headquarters as representative” for the defendant and a second company by which he was also employed. The defendant paid a portion of the rent

and related business expenses for that office. *Id.* The employee solicited sales of the accused product in the district and forwarded orders to the defendant's St. Louis office, which then sent the products in question from outside the district to customers in the district. *Id.* The Supreme Court held these facts to be "insufficient to support the allegation that [the defendant] had a regular and established place of business" in New York for purposes of the patent venue statute. *Id.*

The facts relating to the four AWS employees who live in this district are even more remote than those that the Supreme Court found insufficient in *W.S. Tyler*. Here, there is no commercial office space for which AWS pays rent. The four AWS employees who live in the district work from their homes and, on occasion, travel to customer sites. AWS does not hold out those employees' homes, nor the customer sites they visit, as its place of business, much less as any kind of regional "headquarters"—as were the facts in *W.S. Tyler*. *Id.*; Ex. C ¶ 4. Like the defendant in *W.S. Tyler*, AWS does not fulfill orders from any location within the district. 236 U.S. at 725. Rather, the accused products and services are supplied from servers located outside the district. Ex. A ¶¶ 8-10. Venue is therefore improper under *W.S. Tyler*.

W.S. Tyler is the only binding authority here. The Federal Circuit has just once addressed a dispute over whether a corporation had a "regular and established place of business" under Section 1400(b). *See In re Cordis*, 769 F.2d 733 (Fed. Cir. 1985). In *Cordis*, the court denied a defendant's petition for mandamus seeking to overturn a district court's assertion of venue, because the court of appeals discerned no "clear abuse of discretion" in the district court's ruling. *Id.* at 736 (citation omitted). There, two of the defendant's local employees (for whom the defendant supplied a company car) maintained a substantial inventory of infringing pacemakers (roughly \$90,000 worth) in their home offices, some of which they sold directly to local customers. *Id.* at 735. The corporate defendant was listed in the local phone directory, and used a local

secretarial service to answer calls as the defendant. *Id.* Under those specific facts, the court held that the extraordinary remedy of mandamus was not warranted. *Id.* at 736. However, it cautioned that it was deciding only that “a rational and substantial legal argument may be made in support of the [district] court’s order,” and *not* whether, “on a normal appeal,” it “would find reversible error.” *Id.* at 737. Largely because *VE Holding*’s overly expansive interpretation of “resides” had governed from 1990 until two months ago, the Federal Circuit has not had occasion to address the “regular and established place of business” prong of the statute since.

Notwithstanding the Federal Circuit’s relative silence, the law concerning this prong of the statute has continued to develop both in the Supreme Court and elsewhere. Courts have long held that “regular and established place of business” means more than merely “doing business.” *See, e.g., Mastantuono v. Jacobsen Mfg. Co.*, 184 F. Supp. 178, 180 (S.D.N.Y. 1960); *Johnston v. IVAC Corp.*, 681 F. Supp. 959, 964 (D. Mass. 1987) (collecting cases). Indeed, the Supreme Court made this clear in *Brunette Machine Works, Ltd. v. Kockum Industries, Inc.*, 406 U.S. 706 (1972). The Court explained that the special patent venue statute—which has not substantively changed since its enactment—was far more limited than the general venue statute in effect at the time of *Brunette*—which authorized suit where a corporation was “doing business” or where “the claim arose.” *Id.* at 713 n.13 (1972) (citations omitted).¹

Thus, Section 1400(b) requires more than merely having sales, advertising, or employees in the district. Instead, the defendant must maintain a physical “place” of business. *See Coleco Indus., Inc. v. Kransco Mfg., Inc.*, 247 F. Supp. 571, 575 (S.D.N.Y. 1965) (“This ‘place of

¹ In any event, the Complaint does not allege that either defendant is “even licensed to do business in [Tennessee],” a fact which “is practically dispositive in determining that [defendants] do[] not conduct business [here] through a ‘permanent and continuous presence.’” *Hand Held Prod., Inc. v. Code Corp.*, No. CV 2:17-167-RMG, 2017 WL 3085859, at *4 (D.S.C. July 18, 2017).

business’ can be a branch office, a sales-showroom, or a warehouse or distribution center. But it must be maintained and paid for by the defendant.” (citation omitted)). Accordingly, “[t]he majority” of cases hold that “the defendant must maintain, control, and pay for a permanent physical location within the forum district, and conduct business from that location.” Matthew J. Sampson, *Corporate Venue in Patent Infringement Cases*, 40 DePaul L. Rev. 207, 223 (1990). While a physical presence is required under this line of cases, they further recognize that “mere maintenance of an office in a district is not sufficient” in and of itself. *Brevel Prod. Corp. v. H & B Am. Corp.*, 202 F. Supp. 824, 828 (S.D.N.Y. 1962); see *American Cyanamid v. Nopco Chem. Co.*, 388 F.2d 818, 819-20 (4th Cir. 1968); *Univ. of Ill. Found. v. Channel Master Corp.*, 382 F.2d 514, 515-16 (7th Cir. 1967); *General Radio Co. v. Superior Elec. Co.*, 293 F.2d 949, 950-51 (1st Cir. 1961); *Warner-Lambert Co. v. C.B. Fleet, Inc.*, 583 F. Supp. 519, 521-23 (D.N.J. 1984). Rather, even where “it is undisputed that the defendant leases office space in the district, it is necessary for the court to inquire whether the plaintiff has proved that the defendant engages in a substantial part of its ordinary business in a continuous manner in the district.” *MAGICorp. v. Kinetic Presentations, Inc.*, 718 F. Supp. 334, 340 (D.N.J. 1989) (emphasis added); accord, e.g., *Thermolife Int’l, LLC v. F3 Nutrition, LLC*, No. CV-13-6883-RGK (PLAx), 2013 WL 12149682, at *1 (C.D. Cal. Dec. 9, 2013); *Roblor Mktg. Grp., Inc. v. GPS Indus., Inc.*, 645 F. Supp. 2d 1130, 1145 (S.D. Fla. 2009). Applying this rule, “venue has been held not to exist over corporate defendants even in instances where the corporation maintained an office in the district to solicit orders, for service of process, or for maintenance and repair of equipment,” and where “sales representatives or supervisory personnel” or “phone listings, post office addresses or bank

accounts” are present in the district. *L. D. Schreiber Cheese Co., Inc. v. Clearfield Cheese Co., Inc.*, 495 F. Supp. 313, 317-18 (W.D. Pa. 1980) (citations omitted).²

While *Cordis* distinguished some of these cases on their facts, courts continued to follow the majority approach even after *Cordis*, stressing that the Federal Circuit there had decided only “that a ‘rational and substantial legal argument’ can be made to uphold the district court’s finding based on the local sales representatives’ activities out of their homes.” *E.g., Johnston*, 681 F. Supp. at 964; *Herbert v. Diagnostic Products Corp.*, No. 85-Civ.-0856, 1986 WL 6781, at *4 (S.D.N.Y. June 10, 1986); *London v. Greene’s Luggage, Inc.*, No. 86 C 4735, 1988 WL 64586, at *3 (N.D. Ill. June 15, 1988). Thus, even after *Cordis*, decisions such as *Herbert* hold that the presence of local sales representatives who both solicited local orders and handled phone calls in the district merely “establishe[d] [the defendant’s] presence in the district,” not “a regular and established place of business.” 1986 WL 6781, at *4; *see also E.T. Mfg. Co., Inc. v. Xomed, Inc.*, No. 85-C-7133, 1986 WL 321, at *2 (N.D. Ill. Jan. 13, 1986) (sales of accused products through employees in the district is insufficient without the sort of direct sales and technical involvement at issue in *Cordis*); *London*, 1988 WL 64586, at *2-3 (same); *Johnston*, 681 F. Supp. at 964 (same).

Consistent with this majority approach, another court in this circuit, in one of the first decisions to address the patent venue statute after *TC Heartland*, held that visiting the district to make sales, owning an inactive piece of real property, communicating “by email or telephone with customers in the [district],” and “ship[ping] product . . . to customers in th[e] district does not

² A minority of district courts have taken a broader view of Section 1400(b), but even they are careful to note that the mere “presence of sales employees in the district is not enough.” *Johnston*, 681 F. Supp. at 963 (quoting *Minn. Min. & Mfg. Co. v. Johnson & Johnson Prod., Inc.*, No. CIV. 4-86-359, 1987 WL 10997, at *3 (D. Minn. Jan. 2, 1987)) (punctuation omitted).

establish that defendants have a permanent and continuous presence” in the district. *Stuebing*, 2017 WL 3187049 at *4 (citing *Johnston*, 681 F. Supp. at 964).

Likewise, the activities of the handful of AWS employees who live in this district do not suffice. The facts of *Cordis* are readily distinguishable because the four AWS employees here do not maintain inventory in their homes or make direct sales. Their homes are nowhere listed as Amazon or AWS offices, and they do not employ a local secretarial service held out as an Amazon or AWS office. *Contra Cordis*, 769 F.2d at 735. Moreover, it is beyond dispute that under the majority rule catalogued in *Johnston* and applied there (681 F. Supp. at 962-63) and elsewhere, AWS has no “regular and established place of business” because it maintains no physical location at all in this district. Its employees’ “home[s] in which [they] carr[y] on some of the work that [they] do[] for” AWS are not *AWS’s* offices. *American Cyanamid*, 388 F.2d at 820. Similarly, “[t]he premises of” AWS’s “customer[s] within the district” cannot be *AWS’s* ““established place of business,”” even if its employees visit those premises. *Phillips v. Baker*, 121 F.2d 752, 756 (9th Cir. 1941). Those premises do not “h[o]ld themselves out as sales offices or branches of” AWS. *Faberge, Inc. v. Schick Elec., Inc.*, 312 F. Supp. 559, 561 (D. Del. 1970). Additionally, AWS does not carry on “a *substantial part* of its ordinary business” in this forum (*id.*; *MAGICorp*, 718 F. Supp. at 340-41 (emphasis added)): A tiny fraction of a percent of its employees live in this district. It cannot be said that the activities of these four people constitute a “substantial part” of AWS’s business. For all these reasons, venue is improper.

This result is consistent with “the policy embodied by section 1400(b),” namely to curb “patent infringement suits brought far from an alleged infringer’s place of business” and “impose[] the burden on the patent holder of suing far from its place of business.” *Warner-Lambert*, 583 F. Supp. at 526. Section 1400(b) “is not one of those vague principles which, in the interest of some

overriding policy, is to be given a ‘liberal’ construction.” *Schnell v. Peter Eckrich and Sons, Inc.*, 365 U.S. 260, 264 (1961) (citation omitted). It derives from a statute enacted as “a restrictive measure, limiting a prior, broader venue.” *Stonite Products Co. v. Melvin Lloyd Co.*, 315 U.S. 561, 566 (1942); *see also TC Heartland*, 137 S. Ct. at 1518. It must therefore be interpreted narrowly. *See Warner-Lambert*, 583 F. Supp. at 526.

To be sure, not all courts are content to narrowly construe Section 1400. A judge in the Eastern District of Texas recently did just the opposite, finding that the presence of a sales representative who made over \$345 million in sales from his home in that district was sufficient to establish venue. *See Raytheon Co. v. Cray, Inc.*, No. 2:15-CV-01554-JRG, 2017 WL 2813896, at *1 (E.D. Tex. June 29, 2017). That court announced four factors it considered to reach that result: (1) “physical presence” in the district, (2) “defendant’s representations” regarding its presence in the district, (3) “the extent to which a defendant derives benefits from” a presence in the district, and (4) “targeted interactions with the district.” *Id.* at *11-13. But only the first of those factors is tied to the statutory language. The rest run contrary to *W.S. Tyler*, as well as the majority line of cases described above, because they attempt to substitute other things, *i.e.*, “representations,” “benefits,” and “interactions,” for what Section 1400(b) requires—“a regular and established *place* of business.” 28 U.S.C. § 1400(b) (emphasis added).³

But even if the Court were to consider these other factors (and it should not), they do not support a finding of venue here. AWS does not represent that any of the homes of the four AWS

³ The defendant in *Raytheon* has petitioned the Federal Circuit to issue a writ of mandamus, seeking, *inter alia*, to vacate the district court’s four-factor test and correct its venue determination. *See* Petition, *In re Cray Inc.*, No. 2017-129 (Fed. Cir. July 17, 2017) (Dkt. 1). The Federal Circuit requested briefing from the patentee in response to that petition, and briefing is now complete. *See* Order, *In re Cray Inc.*, No. 2017-129 (Fed. Cir. July 18, 2017) (Dkt. 7).

employees in this district are its place of business. And those four employees are just a tiny percentage of AWS's overall workforce—meaning that the overwhelming majority of the work AWS does occurs, and the benefits associated with that work are derived from, outside this district. Unlike the facts of *Raytheon*, where over \$345 million in sales were attributable to the work of an employee in the Eastern District of Texas, Plaintiffs cannot credibly allege that a disproportionate amount of work and revenue is attributable to the four employees that AWS happens to have in the Eastern District of Tennessee. Finally, while AWS does market and sell to customers in Tennessee, the same thing can be said for every state and district in the country. To find that such activities amount to a “regular and established place of business” is tantamount to declaring that venue is proper nationwide—a finding that cannot be reconciled with even the most outlying precedent, much less the majority rule.

C. Amazon.com, Inc., Has No Connections to the District and Should Be Dismissed for Improper Venue

Just as venue is improper for AWS, it is even more clearly lacking for the other named defendant, Amazon.com, Inc. Like AWS, Amazon.com, Inc., is a Delaware corporation with its principal place of business in Seattle. Dkt. 1 ¶ 26. And Amazon.com, Inc., does not have a regular and established place of business—or any place of business—in the Eastern District of Tennessee. Indeed, it has no facilities and no employees here. Ex. A ¶ 6.

While Amazon.com.dedc, LLC, has facilities here (*id.* ¶ 7), that company is not one of the Defendants, and its connections cannot be imputed to Amazon.com, Inc. To do that, Plaintiffs would have to show that the separate corporations are in practice the same entity: Only if the plaintiff can “carry th[e] burden” of piercing the corporate veil will the contacts of one entity be imputed to the other. *Schippers v. Midas Int’l Corp.*, 446 F. Supp. 62, 63 (E.D. Tenn. 1978). Thus, “[i]n order to satisfy venue requirements in this case by reference to a subsidiary entity, the plaintiff

has the burden of showing that the subsidiary . . . is a ‘mere shadow with no substance’ other than that of the parent.” *Id.*

As this Court has explained, even “a substantial amount of control” does not suffice to meet this test; “the separate corporate character” must be “disregarded” entirely. *Id.* at 64. Other courts too have noted “[i]t is clear under 28 U.S.C. § 1400(b) that the mere existence of a wholly-owned subsidiary in a judicial district does not, by itself, suffice to establish venue over the subsidiary’s parent corporation. Rather, venue is proper with respect to a parent corporation only when that parent has disregarded all but the formalities of separation in its dealings with its subsidiaries.” *L. D. Schreiber*, 495 F. Supp. at 318 (citations omitted); *accord, e.g., Blue Spike, LLC v. Nook Digital, LLC*, No. 6:16-CV-1361-RWS-JDL, 2017 WL 3263871, at *3 (E.D. Tex. July 28, 2017). As a result, the “mere maintenance of an office by a wholly owned subsidiary” does not “subject a parent corporation to the jurisdiction of the state where a subsidiary maintains such an office” unless the parent is “in fact the alter ego of” the subsidiary. *Teledyne Ryan Aeronautical Co. v. Montgomery Ward & Co.*, 326 F. Supp. 813, 818-19 (D. Colo. 1971).

Even where—unlike here—the entities closely cooperate with respect to the accused products, courts will respect “their corporate forms.” *Johnston*, 681 F. Supp. at 961, 964. For example, a distributor of a manufacturer’s products does not have a “regular and established place of business” in the district simply by virtue of the manufacturer’s connections to the district—even if the manufacturer is incorporated in the forum and owns and operates a manufacturing plant in the district “where it manufactures and ships articles alleged to infringe [the] patents.” *Johnson & Johnson v. Picard*, 282 F.2d 386, 387-88 (6th Cir. 1960). “[E]ven where there is a unitary business purpose to manufacture and sell to ultimate consumers, if the operations of the two or more functional components of that unitary business purpose are themselves vested in formally separate

entities, then venue over one under § 1400(b) cannot be gained by treating the regular and established place of business of the other as the office of the former.” *Shapiro v. Ford Motor Co.*, 359 F. Supp. 350, 357 (D. Md. 1973); *accord, e.g., Stevenson v. Doyle Sailmakers, Inc.*, No. CIV. H-86-883, 1988 WL 50721, at *4 (D. Md. Apr. 3, 1988) (same).

Moreover, even if Amazon.com.dedc, LLC’s connections to this district were considered, venue still would be improper. The places of business Amazon.com.dedc, LLC, has in this district—its distribution facilities for physical packages—have no relation to the Accused Services. Ex. A ¶ 7. Accordingly, this district is not “where the defendant has committed acts of infringement and has a regular and established place of business.” For venue to be proper under Section 1400(b), a nonresident defendant must maintain a “‘permanent and continuous presence,’ *with respect to its [accused products or services]*”—including by engaging in “direct in-state sales and inventory” of the accused product and providing “technical support *with respect to the allegedly infringed product.*” *E.T.*, 1986 WL 321, at *2 (emphasis added). Indeed, it was on this basis that the Federal Circuit in *Cordis* distinguished one of the cases following the majority approach to venue, *Channel Master*. *Cordis* stated that, in *Channel Master*, “while there was evidence that the sales representative [in the district] conducted seminars with distributors to promote his employer’s products, there was no evidence to demonstrate that such activities were carried on *concerning the specific product which was the subject of the infringement action.*” 769 F.2d at 737.

Thus, an “office” in the district “will not satisfy the requirement of [the] special patent venue statute” if the office has “absolutely nothing to do with the accused [product] or its manufacture, sale, service or distribution.” *Scaramucci v. FMC Corp.*, 258 F. Supp. 598, 602 (W.D. Okla. 1966); *accord, e.g., Jeffrey Galion, Inc. v. Joy Mfg. Co.*, 323 F. Supp. 261, 265-66

(N.D.W. Va. 1971) (a “Repair and Rebuild Shop” that “does not solicit or accept orders for mining equipment” does not suffice in a case alleging infringement of patent on mining equipment (citing *Scaramucci*, 258 F. Supp. at 602)). Similarly, a salesperson’s presence in the district does not support venue where the salesperson “does not service the alleged infringing [products] manufactured by” the defendant. *General Radio*, 293 F.2d 949. Rather, “there must be some reasonable or significant relationship between the accused item and any regular and established place of business of the accused in the judicial district.” *Scaramucci*, 258 F. Supp. at 602; *accord*, e.g., *Katz v. Lear Siegler, Inc.*, No. CIV-86-536E, 1987 WL 7234, at *2 (W.D.N.Y. Feb. 20, 1987), *vacated on other grounds*, 5 F.3d 1502 (Fed. Cir. 1993) (“the regular established business contemplated by the statute [must] be concerned in some way with the accused items”).

Indeed, the statute’s language and purpose do not bear a reading that would absolve the plaintiff of its burden to show any connection between the accused product and the asserted place of business. The statute addresses a particular location, namely “where the defendant has committed acts of infringement and has a regular and established place of business.” 28 U.S.C. § 1400(b). That “where” must be both where alleged acts of infringement (e.g., sales of the accused product) have occurred and the established “place” of business; these cannot be different places. And, as *Scaramucci* explained, the Supreme Court has specifically rejected a “liberal construction” of Section 1400(b), and held that it “was intended to narrow or restrict” the prior grant of venue “wherever the offender could be served.” 258 F. Supp. at 601-02 (citing *Schnell*, 365 U.S. at 262). Other courts too have explained that Congress sought to restrict venue to locations where records and witnesses pertinent to infringement are kept. *Id.* at 602 (collecting cases). Allowing venue in every district where infringement is alleged to have occurred and any subsidiary of any of the named defendants has some place of business, no matter how unrelated or

limited, would again impermissibly broaden the same venue statute that the Supreme Court just three months ago restored to its proper state. It would also run contrary to the Supreme Court's recent admonition, in cases addressing the related issue of personal jurisdiction, that a defendant should not be subject to suit in a venue based solely on the fact that a product it markets nationwide is sold or used there. *See Bristol-Myers Squibb Co. v. Super. Ct. of Cal., San Francisco County*, 137 S. Ct. 1773, 1783 (2017); *BNSF Ry. Co. v. Tyrrell*, 137 S. Ct. 1549, 1559 (2017). For all these reasons, venue is not proper here.

D. If This Court Does Not Dismiss the Case, It Should Transfer the Action to the Western District of Washington or the Northern District of California

Because venue is improper, this case should be dismissed or alternatively transferred to where venue is proper and it is “in the interest of justice” to do so. 28 U.S.C. § 1406(a). Here, both the Western District of Washington and the Northern District of California would serve this purpose as convenient locations for the resolution of Plaintiffs’ allegations.⁴ *See Thomas v. Exxon Mobil Oil Corp.*, No. 206-CV-144, 2007 WL 1035159, at *1 (N.D. Ind. Apr. 2, 2007) (transfer under Section 1406(a) considers factors similar to those under 28 U.S.C. § 1404(a), including “whether the transferee forum is convenient to the parties and witnesses”); *Roxane Labs., Inc. v. Camber Pharm. Inc.*, 666 F. App’x 899, 901 (Fed. Cir. 2016) (transfer under Section 1404(a) is appropriate to the district where the defendant’s “operations and employees” and “documentary evidence relating to the marketing and sales of the accused products” are located and “the accused products were designed and developed”) (citing *Reese v. CNH Am. LLC*, 574 F.3d 315, 320 (6th Cir. 2009)).

⁴ Venue would also be proper in Delaware, as both Defendants are incorporated there. However, for the reasons explained below, a transfer to either the Western District of Washington or the Northern District of California would be a better fit given the particular facts of this case.

Both Defendants are headquartered in Seattle, within the Western District of Washington, and engineers that develop, maintain, and improve the Accused Services are located there. Dkt. 1 ¶¶ 26-27; Ex. A ¶ 2. AWS also maintains a significant presence in the Northern District of California, including servers supplying the Accused Services. Ex. A ¶ 10. Thus, these districts are more convenient, given the location of parties and at least the Defendants' witnesses, which is of particular import because "[i]n patent infringement cases, the bulk of the relevant evidence usually comes from the accused infringer." *In re Genentech, Inc.*, 566 F.3d 1338, 1345 (Fed. Cir. 2009). California should also be convenient for Plaintiffs. One of the two plaintiffs, Saint Matthew Research, LLC, is a California company with its principal place of business in Los Angeles, California. Dkt. 1 ¶ 25. Plaintiffs' counsel is also based in Los Angeles, which is much closer to the Northern District of California than it is to this district.

Indeed, Defendants expect that the Northern District of California will emerge as a district that is both convenient, and in which venue is proper, for many of the defendants in the related actions filed by Plaintiffs on the same patents-in-suit. Plaintiffs allege that several of these other defendants have facilities and operations in the Northern District of California. *See, e.g., UTRF v. Hewlett Packard Enterprise Co.*, No. 3:17-CV-185, Dkt. 1 ¶ 26; *UTRF v. SAP America, Inc.*, No. 3:17-CV-187, Dkt. 1 ¶ 27. And three defendants, SAP, Citrix, and Cloudera, already have moved to dismiss on venue or transfer their cases to the Northern District of California. *See* 3:17-CV-187, Dkt. 28 at 25; *UTRF v. Citrix Systems, Inc.*, No. 3:17-cv-894 (M.D. Tenn.), Dkt. 30 at 2-4, 9-12; *UTRF v. Cloudera, Inc.*, No. 3:17-cv-895 (M.D. Tenn.), Dkt. 29 at 2, 15. A "sensible result" would be to transfer those cases to a district like the Northern District of California where venue is commonly available and proper. *Delta Media Grp., Inc. v. Kee Grp., Inc.*, No. 5:07-CV-01597, 2007 WL 3232432, at *6 (N.D. Ohio Oct. 31, 2007).

II. The Complaint Should Also Be Dismissed Because It Fails to State a Plausible Claim for Patent Infringement

A. The Complaint Must Allege Facts for Each Claim Limitation

Since the abrogation of Form 18,⁵ federal courts have consistently required that patent complaints must allege non-conclusory facts that make liability “plausible,” *i.e.*, facts that “allow[] the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009); *see also, e.g., Novitaz, Inc. v. inMarket Media, LLC*, No. 16-cv-6795-EJD, 2017 WL 2311407, at *4 (N.D. Cal. May 26, 2017); *Atlas IP, LLC v. Exelon Corp.*, 189 F. Supp. 3d 768, 775 (N.D. Ill. 2016). “[A] formulaic recitation of the elements of a cause of action will not do,” and merely “conclusory” allegations are “not entitled to be assumed true.” *Iqbal*, 556 U.S. at 681 (citation omitted).

It is well-established that a patent is infringed only if the accused product meets every limitation of at least one claim. *See Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1215 (Fed. Cir. 2014). Thus, the complaint must contain plausible factual allegations showing *how* every element of a claim in the patent is allegedly satisfied by the accused product. *See, e.g., Novitaz*, 2017 WL 2311407, at *4. A complaint cannot simply “parrot claim language” and assert that a product meets that language; that is merely a legal conclusion, “as the claim language is what [the patentee] must show in order to prove infringement.” *Id.* The “complaint must go beyond only stating in conclusory terms that each accused product or service meets the elements of” a claim. *Comcast Cable Comm’ns, LLC v. OpenTV, Inc.*, 319 F.R.D. 269, 273 (N.D. Cal. 2017); *see also*,

⁵ Form 18 of the Federal Rules of Civil Procedure provided a generic form setting forth minimal requirements for pleading patent infringement. It was abrogated in December 2015.

e.g., *Raindance Technologies, Inc. v. 10x Genomics, Inc.*, 2016 WL 927143, at *2 (D. Del. Mar. 4, 2016); *Macronix Int'l Co., Ltd. v. Spansion Inc.*, 4 F. Supp. 3d 797, 804 (E.D. Va. 2014).

B. Plaintiffs Fail to Allege Facts Showing How the Limitations Are Met

The Complaint here fails to state a claim for infringement for two reasons, either of which warrants dismissal: (1) Plaintiffs do not allege sufficient facts to show how each Accused Service satisfies all claim limitations, and (2) Plaintiffs do not allege that any single Accused Service, much less all of them, meets every limitation of the asserted claims.

For many claim limitations, the Complaint simply parrots the claim language and alleges, without explanation or facts, that “one or more” of the Accused Services meet that limitation. *See, e.g.*, Dkt. 1 ¶¶ 65-66 (’411 patent), 93-96 (’733 patent), 114 (’983 patent), 116-18 (’983 patent). The Complaint does so despite the fact that there is extensive publicly-available information describing the Accused Services. Indeed, the Complaint quotes *some* such information. *See, e.g.*, Dkt. 1 ¶¶ 76 n.30, 104 n.31, 126 n.32, 144 n.33, 162 n.34. But for many of the claim limitations, there are either no facts alleged at all, or the information that is quoted bears no relationship to that limitation and the Complaint offers no allegations to connect the two.

This is especially significant because the claims of the patents-in-suit include a number of specific requirements that the Complaint wholly fails to identify in the Accused Services. For example, claim 18 of the ’733 patent (which is the only claim of that patent that the Complaint specifically accuses Defendants of infringing) requires, among other things, a plurality of host processors *each* of which must:

- i) “broadcast[] . . . load information of its processor capacity and search queue length to at least one other” host processor and
- ii) “bring[] its search queue of client queries into balance . . . according to a time constant responsive to receipt of” the broadcasted information, wherein that balancing must also entail

- iii) “exchang[ing] unprocessed search requests with a recipient host processor responsive to a stochastic selection process” and
- iv) “exchang[ing] a block of search requests . . . and adjusting the size of the block . . . according to relative processing speeds of host processors and inter-processor communications protocol between the host processors.”

Dkt. 1 Ex. B (’733 patent) at 34:1-42. Yet the only allegation the Complaint offers for each of those requirements is a bare assertion that “one or more” of the Accused Services do it. *See* Dkt. 1 ¶¶ 91 (i), 93 (ii), 94-95 (iii), 96 (iv). Moreover, in the rare instance where the Complaint does allege facts—*e.g.*, when it copies two diagrams that purport to show the architecture of one of the Accused Services, Amazon Redshift, and a third titled “Queue hopping” (*e.g.*, *id.* ¶¶ 84, 86, 92)—it fails to connect those facts to the particular requirements of the asserted patent claim. *See Raindance*, 2016 WL 927143, at *2 (dismissing the complaint where the plaintiff made “no attempt to relate any [of its] factual assertions with any of the asserted claims”). A complaint must “explain *how*” the features of the accused product “plausibly meets the limitations” of the asserted claims. *Scripps Research Inst. v. Illumina, Inc.*, No. 16-CV-661 JLS (BGS), 2016 WL 6834024, at *6 (S.D. Cal. Nov. 21, 2016) (emphasis added). Simply reciting that all of these “critical claim elements” are met without any factual support, or even an allegation to explain how any one accused product, much less all of the accused products, allegedly does what the claims require, does not present a plausible claim for infringement. *Novitaz*, 2017 WL 2311407 at *4.

The Complaint offers similarly deficient allegations for the other patents-in-suit. Claim 1 of the ’411 patent, for example, requires host and root host processors each of which must: “maintain[] a list of available host processors and information about the capacity and load for each available host processor in memory,” “broadcast[] its capacity and load information to other host processors,” and “bring[] its search queue into balance with another host processor according to a time constant in response to receipt of said broadcast capacity and load information.” Dkt. 1 Ex.

A ('411 patent) at 29:53-60. But the Complaint offers no factual allegations to show how the Accused Services meet any of these limitations. *See* Dkt. 1 ¶ 66.

As another example, claim 1 of the '983 patent is drawn to a method of organizing database records that requires, *inter alia*, applying a mathematical technique, “principal component analysis,” to select vectors and then “formulating a test based on the selected vectors” (step (f)) and “performing” that test to organize records “into clusters” (step (g)). Dkt. 1 Ex. C ('983 patent) at 30:18-39. Yet the Complaint offers no factual allegations regarding the test the accused products allegedly formulate and perform to infringe that claim. *See* Dkt. 1 ¶¶ 117-18 (parroting claim language and concluding it is satisfied).

The allegations regarding the '612 and '106 patents are even more threadbare. The only claims identified in the Complaint ('612 claim 1 and '106 claim 14) both require “defining a function . . . [that] comprises a combination of measures of entropy and adjacency” and “partitioning” based on the same. '106 patent (Dkt. 1, Ex. E) at 31:26-32:3; '612 patent (Dkt. 1, Ex. D) at 30:31-34. But none of the allegations regarding the Accused Services say anything about the function those Services allegedly use to partition data that relies upon a “combination of measures of entropy and adjacency,” as required by the patent claims. *See* Dkt. 1 ¶¶ 153-154 ('106 patent); *see also* ¶ 134 ('612 patent). Instead, the Complaint simply states “on information and belief” that these measures are used in “one or more” of the Accused Services—then block quotes documentation pertaining to only one of those products (Amazon Machine Learning) that never once mentions either entropy or adjacency. *Id.* There are no facts alleged for any of the other Accused Services. And even for Amazon Machine Learning, there is nothing in the Complaint that shows how the information in this block quote supposedly relates to the “measures of entropy and adjacency” required by claim 14 as opposed to the myriad of other techniques known for

partitioning data in a database. *See e.Digital Corp. v. iBaby Labs, Inc.*, No. 15-CV-05790-JST, 2016 WL 4427209, at *5 (N.D. Cal. Aug. 22, 2016) (dismissing complaint for failing to connect factual allegations to claim limitations); *Scripps*, 2016 WL 6834024, at *6 (same).

This is an important distinction because the patents-in-suit acknowledge that there were many “existing database indexing methods” and parallel computing schemes in the prior art. *See, e.g.*, ’612 patent at 1:25-42 (identifying various prior art techniques). Because there are a multitude of techniques for partitioning and searching for data, simply alleging facts to show that a product involves databases and multiple processors in some capacity for one product (and alleging no facts at all for others) does not make out a plausible claim for infringement of the particular techniques defined by the limitations recited in the claims of the patents-in-suit. *See Atlas IP*, 189 F. Supp. 3d at 775 (“Because the failure to practice even a single element is all that separates innovation from infringement, there is always an obvious alternative explanation where a plaintiff does not allege facts for each element.”). That is especially clear where, as here, the complaint focuses only on a feature admittedly present in the “prior art.” *Asghari-Kamrani v. United Servs. Auto. Ass’n*, No. 2:15-CV-478, 2016 WL 1253533, at *4 (E.D. Va. Mar. 22, 2016).

C. The Complaint Does Not Allege That Any One Accused Service Meets All the Limitations of Any Claim

The Complaint is deficient for the additional reason that it does not allege—even “on information and belief”—that any one, much less all, of the Accused Services meet all of the limitations of the asserted claims. For each of the asserted patents, the Complaint accuses multiple services of infringement. *See* Dkt. 1 ¶¶ 59 (’411 patent), 82 (’733 patent), 110 (’983 patent), 132 (’612 patent), 150. But for most claim limitations, the Complaint says only that the limitation is satisfied by “one or more of” the multiple services it identifies. *See, e.g., id.* ¶¶ 84-89, 91-94 (emphasis added). That allegation is consistent with one limitation being met only by one Accused

Service, and another limitation of the same patent claim being met only by a different Accused Service. In such instance, neither service would meet every limitation of any claim, and thus there would be no infringement.

For example, the Complaint accuses the following services of infringing claim 18 of the '733 patent: "Amazon Redshift (including functionality for: Amazon High Performance Computing ("HPC"), Amazon CloudWatch, Amazon Auto Scaling, and Amazon Elastic Load Balancing functionality)." Dkt. 1, ¶¶ 82, 100. Yet for many of the claim limitations, the Complaint alleges only that the limitation is met by "one or more" of those products—not that any one product meets all of the limitations of claim 18 or any other claim of the '733 patent. *Id.* ¶¶ 84-87, 93, 96. The Complaint's allegations for the other Asserted Patents are similarly deficient. *See id.* at 61 ('411 patent), 84-89, 91-94 ('733 patent), 113-118 ('983 patent), 134-136 ('612 patent), and 153-154 ('106 patent). Because a product cannot infringe unless that same product satisfies *all* of the claim limitations, *see Ericsson*, 773 F.3d at 1215, Plaintiffs' vague "one or more" allegations—which do not allege that "any one product . . . performs all elements" of any patent claim—do not state a claim for infringement. *TeleSign Corp. v. Twilio, Inc.*, No. CV 16-2106-PSG-(SSX), 2016 WL 4703873, at *3 (C.D. Cal. Aug. 3, 2016).

CONCLUSION

For the foregoing reasons, the Complaint should be dismissed. In the event the Court decides venue is improper, but does not otherwise dismiss, the action should be transferred to the Western District of Washington or the Northern District of California.

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CERTIFICATE OF SERVICE

I hereby certify that on August 31, 2017, a copy of the foregoing was filed electronically. Notice of this filing will be sent by operation of the Court's electronic filing system to all parties indicated on the electronic filing receipt.

/s/ Mark N. Reiter
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